

IN THE CLAIMS:

Please add new claims 41 and 42, cancel claims 33, 34 and 35 and amend claims 12-32 and 36-39 as follows:

1. (Original) A treatment apparatus for excrement comprising
a reactor basin for containing the raw material and excrement, provided with at least two concave parts having curved profile on the bottom;
a temperature control means for maintaining the temperature within said reactor basin at a predetermined range; and
at least two mixing devices for mixing the raw material and excrement, matched with each concave parts.

2. (Original) A treatment apparatus for excrement, wherein at least two mixing devices are spaced apart each other, each of which respectively has a rotation shaft and a helical blade stirrer provided on said rotation shaft by a plurality of spokes.

3. (Original) A treatment apparatus of claim 2, wherein said helical blade stirrer is divided into two parts, helical direction of which are disposed oppositely.

4. (Original) A treatment apparatus of claim 3, wherein each part of the helical blade stirrer is provided continuously.

5. (Original) A treatment apparatus of claim 4, wherein a protuberant intersection is formed after said two concave parts in the bottom of said basin being overlapped, the height of which is lower than that of the rotation shaft of the mixing device.

6. (Original) A treatment apparatus of claim 5, wherein the curves of the concave parts are substantially spaced evenly with said mixing device.

7. (Original) A treatment apparatus of claim 6, wherein pluvimixing rings are respectively provided at outer side of each helical blade stirrer, on which a plurality of blocks for loosening are provided.

8. (Original) A treatment apparatus of claim 1, wherein said reactor basin is covered by a top plate, on which a drop inlet is provided.

9. (Original) A treatment apparatus of claim 8, wherein a urinary inlet is provided with the top plate of the reactor basin, spaced apart from the drop inlet by a predetermined distance.

10. (Original) A treatment apparatus of claim 9, wherein said reactor basin further comprise a conduit, the inlet of which is communicated with said urinary inlet and the outlet of which is adjacent to said drop inlet.

~~12~~11. (Currently Amended) A treatment apparatus of claim 1, wherein said mixing devices respectively have a rotation shaft and a helical blade stirrer provided on said rotation shaft by a plurality of spokes, said helical blade stirrer overlap partially.

~~13~~12. (Currently Amended) A bio-toilet, being divided into two spaces by a floor, wherein the space under the floor is provided with

a tank, the top plate of which having at least one drop inlet;

a reactor basin for containing the raw material and excrement, provided with at least two concave parts having curved profile on the bottom;

a temperature control means for maintaining the temperature within said reactor basin at a predetermined range; and

at least two mixing devices for mixing the raw material and excrement, matched with each concave parts.

a driving means provided outside the tank for driving the two mixing devices;
and

a control unit.

1413. (Currently Amended) A bio-toilet of claim 1312, wherein at least two mixing devices are spaced apart each other, each of which respectively has a rotation shaft and a helical blade stirrer provided on said rotation shaft by a plurality of spokes.

1514. (Currently Amended) A bio-toilet of claim 1413, wherein said helical blade stirrer is divided into two parts, helical direction of which are disposed oppositely.

1615. (Currently Amended) A bio-toilet of claim 1514, wherein pluvimixing rings are respectively provided at outer side of each helical blade stirrer, on which a plurality of blocks for loosing are provided.

1716. (Currently Amended) A bio-toilet of claim 1615, wherein a protuberant intersection is formed after said two concave parts in the bottom of said basin being overlapped, the height of which is lower than that of the rotation shaft of the mixing device.

1817. (Currently Amended) A bio-toilet of claim 1716, wherein the curves of the concave parts are substantively spaced evenly with said mixing device.

1918. (Currently Amended) A bio-toilet of claim 1817, wherein the distance between the mixing device and the concave parts is about 1cm-3cm.

2019. (Currently Amended) A bio-toilet of claim 1918, wherein a support is provided on the bottom plate of the tank between the two concave parts.

2120. (Currently Amended) A bio-toilet of claim 2019, wherein said temperature control means comprising

a heating plate, disposed on the outer surface of the reaction basin; and
a insulation layer, covered the heating plate.

2221. (Currently Amended) A bio-toilet of claim 2120, wherein the temperature control means further includes a holder for holding the insulation layer, one end of which is secured to the support and the other end is secured to the tank by a spring hook.

2322. (Currently Amended) A bio-toilet of claim 1413, wherein a drop inlet and a urinary inlet is provided on the top plate of the tank, spaced apart from each other.

2423. (Currently Amended) A bio-toilet of claim 2322, wherein a conduit is also provided within the tank, the inlet of which is communicated with said urinary inlet and the outlet of which is adjacent to said drop inlet.

2524. (Currently Amended) A bio-toilet of claim 2423, wherein a plurality of dispensing holes is provided at the bottom of the conduit.

2625. (Currently Amended) A bio-toilet of claim 2524, wherein the diameter of the dispensing holes increases gradually as they approach the outlet.

2726. (Currently Amended) A bio-toilet of claim 1413, wherein the top plate of the tank is assembled with the side plate of the tank in a removable manner with a heat-insulating element at the juncture between the top plate and the side plate.

2827. (Currently Amended) A bio-toilet of claim 1312, wherein further comprise a exhaust device, provided with

an air outlet in the top plate of the tank;

an air vent tube opening to the outside; and

an exhaust fan in the air vent tube.

2928. (Currently Amended) A bio-toilet of claim 2827, wherein said exhaust fan is integrated with the air outlet.

3029. (Currently Amended) A bio-toilet of claim 1918, wherein a holder for said control unit is provided at the side plate of the tank.

3130. (Currently Amended) A treatment method for decomposing excrement by using the treatment apparatus of claim 1, comprising the steps of

providing asaid reactor basin for ~~filling raw materials~~ containing the raw material and excrement, provided with said at least two concave parts;

providing asaid temperature control means for maintaining the temperature within ~~the~~ the reactor basin at a predetermined range; and

providing said at least two mixing devices ~~in reactor basin~~ for mixing the raw material and excrement, matched with each concave part; ~~and~~

~~disposing a timer for detecting a time interval during which the mixing devices are in still state; and~~

~~when the timer interval is equal to a predetermined value, driving the mixing devices to stir the raw material.~~

3231. (Currently Amended) A method of claim 3130, wherein ~~comprises~~further including the step of driving the mixing devices within a predetermined time interval is 0.25-4 hours.

33. (Canceled)

34. (Canceled)

35. (Canceled)

3635. (Currently Amended) A method of claim 31, wherein the step of driving the mixing devices comprises driving the mixing devices in a reverse direction when the mixing devices complete one turn of rotation so as to sufficiently stir the excrement.

3736. (Currently Amended) A method of claim 3635, wherein one turn of rotation for the mixing devices is ~~completed by of being driven~~driving the mixing devices several times.

3837. (Currently Amended) A method of claim 3130, wherein the range of predetermined temperature is about 50°C-70°C.

3938. (Currently Amended) A method of claim 3837, wherein the raw material is sawdust.

39. (New) TheA method claim 37, further comprising the step of driving the mixing devices when the treatment apparatus comes into use.

40. (New) TheA method of claim 40, further comprising the step of driving the mixing devices after the usage for the treatment apparatus is completed.